

Serial No.: 10/788,462
Atty. Docket No.: P68853US0

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application.

LISTING OF CLAIMS:

1. (Canceled).
2. (Previously Presented) The spray nozzle as claimed in claim 7 wherein said body is a fitting, said nozzle being screw threaded to said fitting to enable separation of said nozzle from said fitting and replacement by a fitting having an orifice of a different size.
3. (Previously Presented) The spray nozzle as claimed in claim 7 wherein said side wall surfaces on said nozzle converge at an angle ranging between 1° and 3°.
4. (Original) The spray nozzle as claimed in claim 3 wherein said angle of convergence of said side walls is 2°.
5. (Previously Presented) The spray nozzle as claimed in claim 7 wherein said body is tubular and includes a threaded end to support said body from a liquid supply pipe, the interior of said

body including a peripheral inwardly extending flange having a central opening forming said orifice.

6. (Previously Presented) The spray nozzle as claimed in claim 7 wherein said body includes a threaded end supporting a threaded area at one end of said nozzle to enable separation of said nozzle and body.

7. (Previously Presented) A spray nozzle for attachment to a supply of pressurized liquid comprising a body having an orifice communicating with a supply of pressurized liquid, a nozzle attached to said body and receiving pressurized liquid therefrom, said nozzle including a pair of longitudinally extending, transversely spaced side walls interconnected by a top wall and open at the bottom to define an inverted U-shaped cross-sectional configuration, said side walls including inner wall surfaces that are substantially vertical, said side walls converging longitudinally from said body to a discharge end of said nozzle, a diffuser blade depending from said top wall oriented in spaced parallel relation to said side walls at a discharge end of said nozzle to define a pair of passageways for discharge of liquid in the form of droplets into a spray pattern, and a thin plate forming a closure for a major portion of the open bottom between said side

Serial No.: 10/788,462
Atty. Docket No.: P68853US0

walls, said plate including an air inlet below said orifice in said body, said plate having an outer end terminating in closely spaced relation to said diffuser blade.

8. (Previously Presented) A spray nozzle communicating with a supply of pressurized liquid, said spray nozzle comprising a fitting having an orifice therein controlling the rate of liquid flow therethrough, a nozzle attached to said fitting and receiving pressurized liquid passing through said orifice, said nozzle including a pair of longitudinally extending, transversely spaced side walls interconnected by a top wall and an open slot at the bottom to define an inverted U-shaped cross-sectional configuration, said side walls including inner surfaces that are substantially vertical, said inner side wall surfaces converging longitudinally from said fitting to a discharge end of said nozzle, a diffuser blade depending from said top wall and oriented in spaced relation to said side walls to divide said slot into a pair of passageways for discharge of liquid into a spray pattern, a thin plate extending between lower edge portions of said side walls and forming a closure for a major portion of the open slot at the bottom of said side walls, said plate including an air inlet below said orifice in the fitting to enable air being drawn into and mixing with liquid flowing between the side walls and discharged

Serial No.: 10/788,462
Atty. Docket No.: P68853US0

from the nozzle to reduce drift of liquid being discharged into the spray pattern.

9. (Original) The spray nozzle as claimed in claim 8 wherein said air inlet is a notch in an end edge of said plate adjacent said fitting, said inner side wall surfaces forming a reduced pressure zone when liquid passes from the orifice into said nozzle, said reduced pressure zone draws air into liquid between the side walls for mixing with the liquid and discharge past said diffuser blade into said spray pattern.

10. (Original) The spray nozzle as claimed in claim 9 wherein said plate includes an outer end spaced a short distance from said diffuser blade to enable downward discharge of a small quantity of liquid and air into said spray pattern.

11. (Original) The spray nozzle as claimed in claim 10 wherein said side wall inner surfaces on said nozzle converge at an angle ranging between 1° and 3°.

12. (Previously Presented) The spray nozzle as claimed in claim 8 wherein said fitting is tubular and includes a threaded end to support said fitting from a liquid supply pipe, the interior of

Serial No.: 10/788,462
Atty. Docket No.: P68853US0

said fitting including a peripheral inwardly extending flange having a central opening forming said orifice.

13. (Previously Presented) The spray nozzle as claimed in claim 8 wherein said fitting includes a threaded end supporting a threaded area at one end of said nozzle to enable separation of said nozzle from said fitting thereby enabling fittings having differently sized orifices to be assembled with the same nozzle.

14. (Previously Presented) The spray nozzle as claimed in claim 7 wherein the edge of said diffuser blade facing said body being downwardly curved and having a lower end portion extending toward said body.

15. (Previously Presented) The spray nozzle as claimed in claim 14 wherein said diffuser blade is integral with said nozzle.

16. (Currently Amended) A spray nozzle communicating with a supply of pressurized liquid, said spray nozzle comprising a fitting having an orifice therein controlling the rate of liquid flow therethrough, a nozzle associated with said fitting and receiving pressurized liquid passing through said orifice, said nozzle including a pair of longitudinally extending, transversely

spaced side walls interconnected by a top wall and an open slot at the bottom to define an inverted U-shaped cross-sectional configuration, said side walls including planar inner surfaces extending continuously throughout their length and being substantially vertical, said inner side wall surfaces converging longitudinally from said fitting to a discharge end of said nozzle, a diffuser blade depending from said top wall and oriented in spaced relation to said side walls to divide said open slot into a pair of passageways for discharge of liquid into a spray pattern, a plate extending between lower edge portions of said side walls and forming a closure for a major portion of the open slot at the bottom of said side walls, the longitudinal portion of said open slot not covered by said plate forming an air inlet adjacent said orifice to enable air admitted into said slot through said air inlet to be mixed with liquid flowing between the side walls and through said passageways to be discharged from the nozzle to reduce drift of liquid being discharged into the spray pattern, said plate including an outer end spaced a short distance from said diffuser blade to enable downward discharge of a small quantity of liquid and air into said spray pattern.

17. (Previously Presented) The spray nozzle as claimed in claim 16 wherein said orifice and planar inner side wall surfaces

Serial No.: 10/788,462
Atty. Docket No.: P68853US0

form a reduced pressure zone when liquid passes from the orifice into said nozzle, said reduced pressure zone mixing air with liquid between the side walls for discharge through said passageways and past said diffuser blade into said spray pattern.